# **Draft Cork City Tree Strategy**

Planting and Management Strategy

Please note that this is a draft document with draft maps and limited images. Cork City Council will revise the content of this document based on feedback received during the public consultation, as appropriate. After these revisions, the strategy will be formatted and additional photos and infographics will be added.

# **Synopsis**

In August 2022, Cork City Council adopted its first Green and Blue Infrastructure Strategy as part of the Cork City Development Plan 2022-2028. Green and Blue Infrastructure, or 'GBI', is a term used to describe the network of natural and semi-natural spaces and corridors in the city. Cities can be viewed as living organisms, with GBI running like veins and nerves through the built environment. These veins include systems of connected vegetation, soil and waterways that form the natural ecosystem, within which the urban fabric lies. This connected network provides for people, biodiversity, and the operation of natural systems.

Trees are a fundamental building block of any GBI network. At present there are over 310,000 trees and over 1,400 kilometres of hedgerows in Cork City's administrative area. Found in varied settings including city streets, public parks, back gardens, educational and businesses campuses, riverbanks, and woodlands, these trees fulfil many purposes: they are fundamental for human health and well-being and for the natural environment, an essential part of Cork City's character and heritage, and a valuable economic asset.

Given the fundamental importance of trees, Cork City has an objective of increasing its tree cover. But doing so is not always straightforward, as urban environments are complex and can present several challenges for trees. Furthermore, Cork is a growing city with ambitious development targets and an expanding urban environment. Integrating existing trees and planting new ones takes careful design and a high level of collaboration to ensure their longevity and health.

This Tree strategy has been prepared to address these issues. It sets out Cork City Council's internal policies and specific action plan through 2028 (the timeframe of the current Development Plan) to

- manage public trees;
- retain existing trees;
- carry out and support more new tree planting in the city; and
- further develop the information base and foundations necessary for the creation of a long-range tree strategy for Cork City, including the development of additional ecological corridors and woodlands.

## **Policy Basis**

At the EU level, the EU Biodiversity Strategy (2030) is an ambitious long-term plan to protect nature and reverse the degradation of ecosystems. Amongst other things, the strategy calls for reforestation, tree planting, and the designation of ecological corridors. In addition, Cork City is an "EU Mission City," being one of 100 European cities selected to participate in a drive to become climate neutral by 2030. This role includes acting as an experimentation and innovation hub to enable all EU cities to follow suit by 2050. Trees are contributors to climate neutrality.

At the local level, the preparation of a Tree Strategy is part of <u>Objective 6.5</u> of the Cork City Development Plan 2022-2028. The Cork City Tree Strategy is one of 18 city-scale GBI projects targeted for delivery to manage, protect, and enhance the city's green and blue infrastructure network during the plan period and beyond. Tree planting and development of a Tree Management Programme are also identified as key actions in the Cork City <u>Heritage and Biodiversity Plan 2021-2026</u> and in the Cork City <u>Air Quality Strategy 2021-2026</u>. Other relevant national and EU policy are summarised in the appendices of this document.

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# **Chapter 1 Trees in Cities: Their Importance and Challenges**

#### Trees are Fundamental to Cities and to People

1 1

In the past, trees within cities were typically only valued for ornamental purposes and were seen as a 'nice to have' amenity. However, we now recognize that trees in cities are fundamental to human wellbeing and the functioning of the natural environment on which we all depend.

#### **Pollution and Flooding Reduction**

1.2

Trees in cities provide a healthier environment for everyone. They absorb carbon dioxide and other gases from the air and produce oxygen. Trees improve air quality by trapping dust particles; levels can be reduced up to 60% on tree-lined streets compared to those without. [1] Trees can act as a sound barrier, absorbing noise in built-up areas. Trees and their root systems absorb water, reducing the potential for flooding. A typical medium-size deciduous tree can intercept over 10,000(L) of rainfall every year. [1] Trees also help prevent riverbank erosion and help filter out some water pollution before it reaches rivers and streams.

#### **Human Health and Well Being**

1.3

Trees have a positive impact on both physical and mental health. Trees not only bring an aesthetic value to the built environment but also reduce stress and contribute to a better quality of life. [2] Scientific studies have shown that the more trees located around a home is associated with a reduced risk of its occupants being prescribed antidepressant medication. [3] Views of trees have also been associated with shorter postoperative hospital stays. [4] Trees create a positive backdrop for outdoor activities, encouraging people of all ages to walk and cycle within their neighbourhood. Trees themselves are also important in allowing children to interact with nature and develop their motor skills.

Connection is a key part of wellbeing, and trees connect us in several ways. They connect us to history and culture, including local myths, legends, and folklore. They create a distinctive landscape, making important landmarks and providing a unique sense of place and location. Trees connect us with our surroundings by marking the changes of seasons with the flowers, scents, and colourful seasonal transformations.

## **Biodiversity and Natural Ecosystem**

1.4

Many animals, including mammals, birds, and pollinators have adapted to live alongside humans in our urban landscape. Woodland, hedgerows, and individual trees in places like parks, golf courses, the river, graveyards, and gardens all provide urban habitats, sanctuary, and movement corridors for wildlife in the city. The maintenance of a complete and comprehensive tree and hedgerow network is important to sustain thriving biodiversity which is in a critical state of emergency.

#### **Economic Benefits**

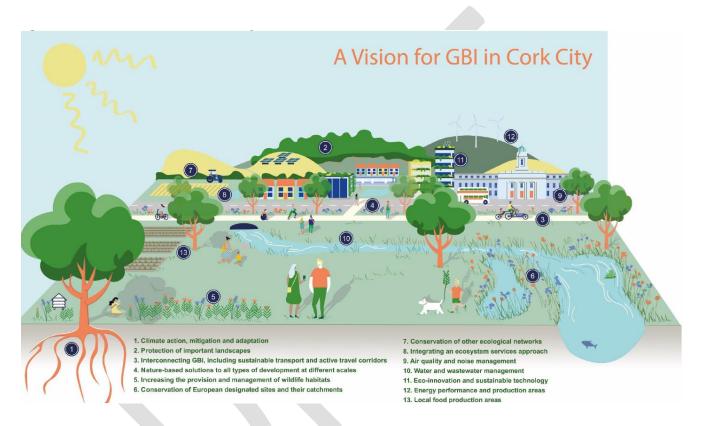
1.5

Trees provide attractive spaces for people to live and interact, and this often translates into economic value. Research has shown that the presence of trees has increased property values by 5-18%.[1] The presence of trees also impacts behaviour. Shopping areas with greenery have been shown to attract more customers. Apartment blocks surrounded by mature trees have experienced 52% fewer reported crimes than those without greenery. [1] Trees also have economic benefits in reducing energy and heating costs, due to their shade, wind sheltering, and air temperature regulation effects.

#### **Climate Adaptation & Mitigation**

1.6

Trees can help mitigate the negative impacts of the Climate Emergency and help sequester carbon. For example, trees can cool the air by several degrees, combating 'urban heat islands'. Heat islands have been identified in the commercial core areas of Cork City where there is a lack of vegetation, within high density residential areas houses with hard surfaced yards and within industrial facilities with high levels of paving. [5] These areas all tend to have low tree canopy cover. Trees reduce costs for cooling of adjacent buildings due to their shading effect. Belts of trees can also buffer the effects of extreme weather, providing shelter for homes, businesses, farms, and livestock.



#### **Trees Face Challenges**

1.7

While trees are vitally important to cities, they also face many challenges in urban environments that must be addressed as part of this strategy to ensure healthy green infrastructure for the city:

# Impacts from Other Uses in the Streetscape

1.8

Trees need space to flourish. A tree is much more than what we see above ground. A healthy tree root system is essential for stabilisation and for absorbing water and nutrients. Below ground, tree roots may be impacted by utility networks or damaged by construction works. Above ground, branches may be subject to vandalism, damaged through carelessness, or excessively pruned due to tree canopy impacts on daylight or access.

## **Competition for Space/ Urban Intensification**

1.9

The National Planning Framework targets 60% population growth for Cork City by 2040. This will result in an additional 125,000 people living in the city within 20 years. While trees can often be designed into new development, some removal of existing lower value stock and supplemental planting is also likely.

## **Perceived Nuisance or Liability**

1.10

Property owners may remove trees or avoid planting them in the first instance due to perceived potential for liability or property damage, inconvenience associated with leaf fall, the economic costs of maintaining trees, or boundary disputes where trees overhang neighbouring properties.

## **Climate Change**

1.11

Trees help mitigate the effects of climate change. However, certain species of trees are also at risk due to predicted increases in extreme weather, including damage caused by stronger and more frequent storm events and by summer heat. These changes may be exacerbated by indirect causes such as more stressful weather conditions and reduced tolerance to pests and diseases. The direct and indirect impacts of climate change may result in a decline in tree health in some species and/or an increased difficulty in establishing young trees. [6]

#### **Pests and Disease**

1.12

Various insects and diseases can affect trees, reducing both their health and value. This includes diseases introduced by global trade. For example, the fungus that causes ash dieback was imported to Ireland from Asia in the 1990's and poses a serious threat to our native Ash (*Fraxinus excelsior*) population.[7]

#### **Other Health Stressors**

1.13

Other factors that that negatively impact tree health in urban environments include air pollution from transport, poor quality soil, and lack of tree management and after care.

# **Chapter 2 Baseline and Trends**

# **Tree Canopy Cover**

2.1

Tree canopy cover is a general indicator of the benefits provided by trees. In 2021 Ireland had a nationwide tree canopy cover of 12%, which is lower than most EU countries. In the same time period, Cork City was just above the national average with a tree canopy cover of 13%. Figure 2.1 shows the extent of tree canopy cover within the Cork City administrative area.

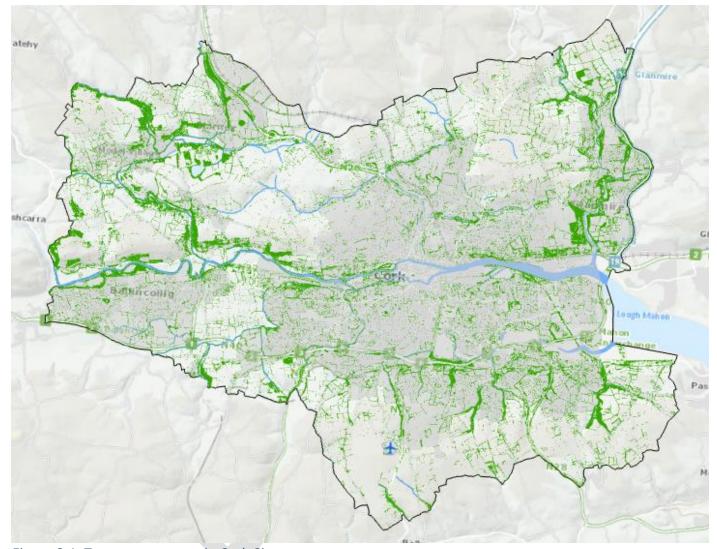


Figure 2.1 Tree canopy cover in Cork City (Source: Blue Sky National Tree Map, 2021)

<sup>&</sup>lt;sup>1</sup>There are several methods of estimating tree canopy coverage. Tree data presented in this strategy is derived from the Blue Sky National Tree Map unless otherwise noted. This dataset, available for 2018 and 2021, provides details of the location, height, and canopy/crown extents for every tree 3m and above in height.

## **Comparison to Other EU Cities**

2.2

The most recent data from the European Environment Agency (2018) indicates that Cork City is on the lower end of tree canopy cover when compared to other EU Mission Cities<sup>2</sup> of a similar size.

Tree Canopy Cover in Medium-Sized EU Mission Cities, 2018

		<b>,</b>
City	2018	2023 Population
	Canopy Cover %	(in thousands)
Tampere, Finland	60%	226
Ljubljana, Slovenia	50%	279
Košice, Slovakia	44%	239
Guimarães, Portugal	43%	163
Aachen, Germany	40%	250
Rzeszow, Poland	38%	184
Vitoria-Gasteiz, Spain	29%	249
Cluj-Napoca, Romania	26%	308
Groningen, The Netherlands	17%	238
Cork, Ireland*	16%	224
Padova, Italy	12%	209

Source: European Environment Agency

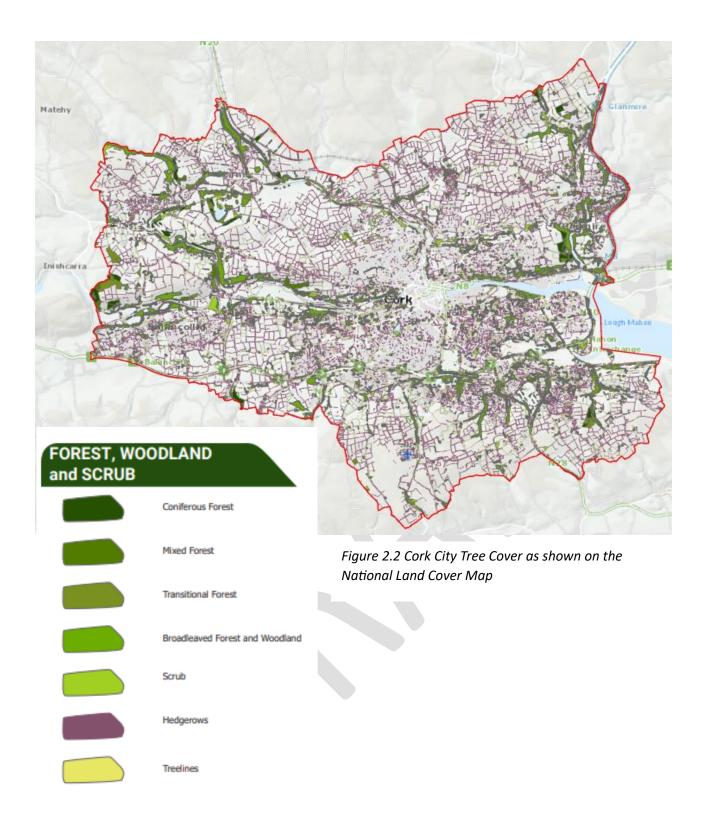
## **Tree Composition**

2.3

The <u>National Land Cover Map</u> provides a general overview of tree cover in Cork City. The map shows spatial groupings for seven different tree categories (see Figure 2.2). Broadleaved trees have the greatest proportion of coverage within the city, followed by hedgerows and treelines<sup>3</sup>. The map also shows how Cork City has limited coniferous forest. Beyond these general indicators, there is limited information currently available regarding the species, age, and health of trees in Cork City.

<sup>2</sup> As noted in the introduction, Cork City is one of a hundred European "Mission Cities" that are part of an EU initiative to become climate neutral by 2030.

<sup>&</sup>lt;sup>3</sup> The National Land Cover map defines treelines as linear lengths of mature trees less than 12 m wide, typically found along field or property boundaries.



## **Ownership**

2.4

Cork City Council owns and manages trees located in public areas such as street and local roads, public parks and green spaces, cemeteries, and the margins of public sportsgrounds. This accounts for an estimated 17% of total tree canopy in the city. The remaining 83% of tree canopy is privately owned or on institutional lands. This includes trees in back gardens, education and business campuses, grounds of religious orders, grounds of medical facilities, private woodlands, private sports grounds, and agricultural land.



Figure 2.3 Example from the City of Vancouver (to be created for Cork)

## **Tree Distribution by City Area**

2.5

The City Development Plan 2022-2028 breaks down the city into and eight sub city areas and the rural hinterland; each sub city area is in turn broken down into a total of 44 neighbourhoods (see Fig. 2.4) As described below, trees are not evenly distributed, and each sub city area has its own unique pattern of tree coverage.

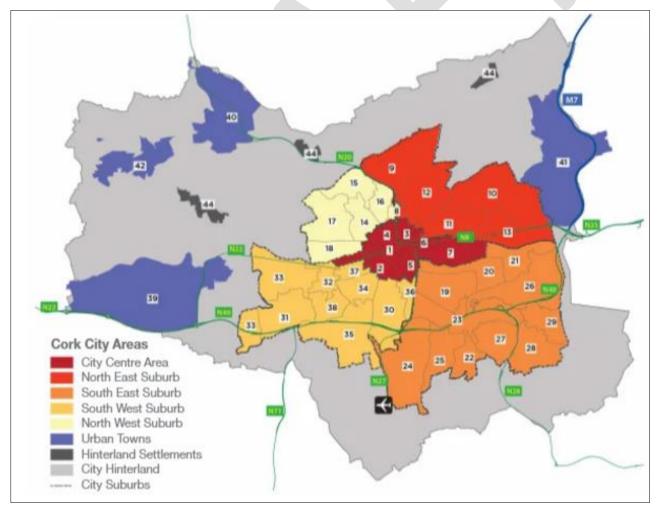


Figure 2.4 Cork City is broken down into 8 no. City Areas that are made of 44 no. neighbourhoods in total

# **Urbanised Areas Compared to Hinterland**

2.6

Though one may expect more trees in the 'countryside', the urbanised areas of Cork City currently have slightly higher tree canopy cover than the rural hinterland. The hinterland includes some extensive woodlands and a number of hedgerows along field boundaries; however, most of the land is in agricultural use as open pastures ("improved grassland") and cultivated fields.

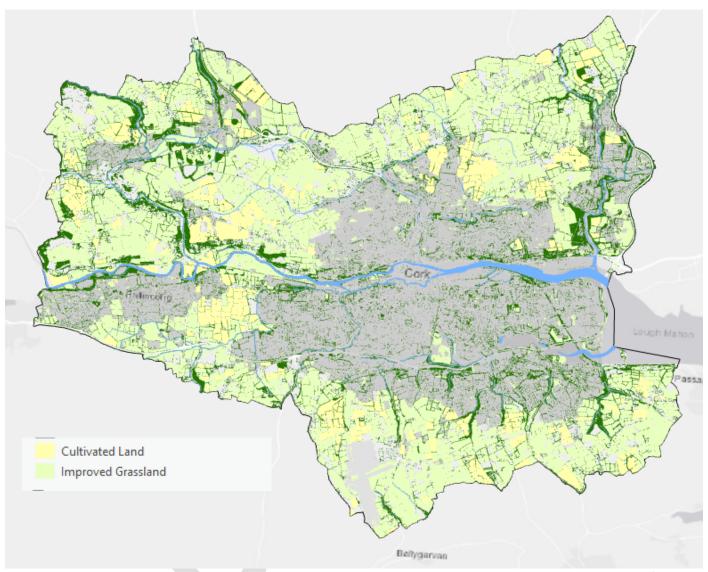


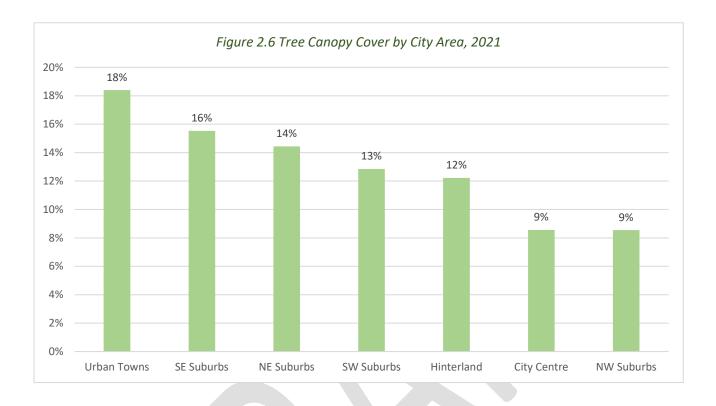
Figure 2.5 In Cork City there is slightly higher tree cover in urbanised areas compared to the rural hinterland. (Source: National Tree Map and National Land Cover Map)



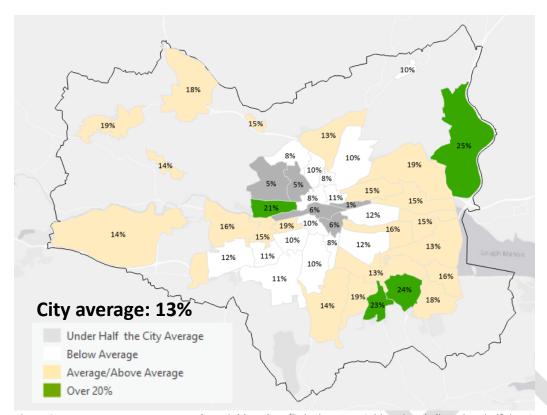
# Comparison by City Subarea and Neighbourhood

2.7

Tree coverage varies significantly by city subarea. As shown in Figure 2.6, urban towns have the highest level of coverage, in fact twice the amount found in the City Centre and North West Suburbs.

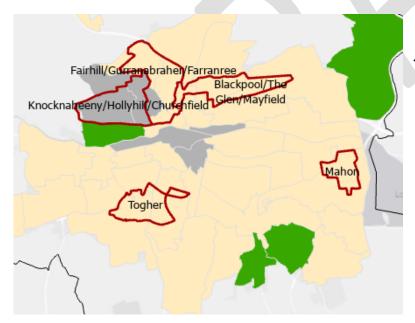


2.8
Figure 2.7 drills down further, showing the percentage of tree canopy cover at the neighbourhood level.
Neighbourhoods with the lowest cover are concentrated in the City Centre and the North West suburbs.



**Figure 2.7 Percent tree canopy cover by neighbourhood.** The lowest neighbourhoods (less than half the city average) are highlighted in grey, and the highest neighbourhoods (50% above the city average) are highlighted in green.

The lowest tree canopy covers areas in the North West suburbs overlap with <u>RAPID</u> areas.<sup>4</sup> Four out of five of the RAPID areas are also below the city average.



# **Tree Canopy Cover 2021**

RAPID Area	Percent
Blackpool/The Glen/Mayfield	16%
Fairhill/Gurranabraher/Farranree	8%
Mahon	8%
Togher	8%
Knocknaheeny/Hollyhill/Churchfield	5%

<sup>&</sup>lt;sup>4</sup>RAPID stands for "Revitalising Areas through Planning, Investment and Development". RAPID works with communities across Cork City focusing on areas designated as disadvantaged. The focus is on communities, the voluntary sector and agencies working together in partnership for the betterment of the community.

## **Tree Character by City Subarea**

A summary of some significant tree stands and unique tree features within each City Subarea is set out below.

# City Centre Neighbourhood (2021 Canopy Cover: 9%)

2.9

Cork City Centre is built on a series of islands that were reclaimed from marshland. Historically, street trees were not a key feature of the original built environment but were incorporated from the 1800's as part of a broader international movement related to beautification and health. [8] Today, the city centre still has the highest frequency of street trees of any of the city sectors. Fitzgerald's Park (the primary park in the centre of the city) contains over 350 trees, several of which were planted for Cork International Exhibition held on the site in 1902. Some other significant tree stands in and around the city centre include those in the Mardyke, Richmond Hill, Saint Patrick's Hill, Belgrave Place, and Bishop's Palace.

#### North-East City Suburbs (2021 Canopy Cover: 14%)

2.10

The North-East Suburbs are particularly notable for their wooded ridges, including those at Lota, the Glen, and Tivoli. This sector also includes the Glen River Park and a future City Park planned for delivery within the heavily wooded area around Glenamought River Valley. Several significant tree stands are associated with the grounds of former country houses and estates, including for Ennismore House, Clifton House and Westboro House. Notably, the North-East has the highest amount of land covered in coniferous trees of all the city sub areas.

## North West City Suburbs (2021 Canopy Cover: 9%)

2.11

The North-West Suburbs also have several significant wooded ridges, including those at Shanakiel, Gurranabraher, Farranferris College, Common's Road, Lover's Walk, and the Blackpool Valley. Other significant tree stands include those at Sunday's Well, Distillery Fields, and on institutional/former institutional lands including Our Lady's Hospital, Saint Mary's Orthopaedic Hospital, and the Former Good Shepherd Convent. Historically, there were no country houses in this subarea, which has an impact on existing tree cover today. Planning is currently underway for a new regional park in the North-West Suburbs that will include significant tree planting.

# South East City Suburbs (2021 Canopy Cover: 16%)

2.12

Like the North-East, a number of the mature trees found in the South-East suburbs were associated with the grounds of former country houses. Grounds associated with Old Court now form the publicly accessible Coillte (Garryduff) Recreational site. Plans are also underway for the provision of a new city park at the grounds of Vernon Mount House. Other significant tree stands associated with country houses include Bessboro House, Ballincurrig House, Dundanion House & Castle, Ravenscourt, and the current Rochestown Park Hotel. The South-East suburbs also include unique tree features such as the Marina promenade (which was first planted in the 1850's); the Mahon/Passage West Greenway (portions of which are constructed along the track of a former railway line); several tree corridors along small streams located within the residential neighbourhoods of Donnybrook, Frankfield, Grange and Maryborough; and the neighbourhood with second highest frequency of public street trees after the City Centre—Mahon.

#### South West City Suburbs (2021 Canopy Cover: 13%)

#### 2.13

The largest grouping of trees in the South West Suburbs are along riverbanks, including the River Lee, the Glasheen River and particularly along the Curragheen River. The Curragheen River serves as both an amenity walk and an ecological corridor. Woodlands along it extend into the grounds of Cork Business and Technology Park on Model Farm Road and Murphy's Farm recreation area. University College Cork is also located in this subarea. There are over 2,500 trees throughout the campus, including two "champion trees",<sup>5</sup> a Chinese Privet and a Caucasian wing nut/walnut. Another unique tree features in the South West suburbs include the cherry and magnolia street trees in the Togher and Ballyphehane neighbourhoods, which provide seasonal colour and scent unique to these areas. Two cemeteries are also notable. Some trees in Saint Finbarr's Cemetery were planted when the cemetery first opened in the 1860's. St. Josephs Cemetery is built on the grounds of the former Cork Botanic Gardens, which first opened in 1808.

#### **Urban Towns** (Average Urban Town 2021 Canopy Cover: 18%)

#### 2.14

Ballincollig had 14% tree canopy cover in 2021. The Ballincollig Regional Park is home to over 3,200 trees, several of which are remnants of older woodland. Other significant tree stands are found along the River Lee to the east of the Regional Park and on the grounds of Parknamore House. Lands adjacent to Oriel House Hotel, which was originally built in 1800 as part of the Administration offices for the Gun Powder Mills, also have significant mature tree coverage.

#### 2.15

In 2021, Glanmire had a tree canopy cover of 25%, the highest of all the city areas/neighbourhoods. There are extensive mature woodlands along the sloping banks of the Glashaboy River, including lands that make up John O'Callaghan Park. Wooded riparian corridors are also found along the Glanmire and Riverstown watercourses. Concentrations of mature trees are also found on the grounds of former country houses, including Ballinglanna House, Glenkeen House, and Poulacurry House.

#### 2.16

Blarney had tree canopy cover of 18% in 2021. The largest woodlands are found along the River Martin and in the grounds of Blarney Castle Estate. The ancient woodlands associated with the castle estate include the "Witch's Yew Tree", thought to be over 600 years old. Another unique feature of Blarney is the historic circular group of trees known as "Ring Wood", visible on Ordnance Survey maps from the 1830's.

#### 2.17

Tower had an overall canopy cover of 19% in 2021. There are significant concentrations of trees along the banks of the Shournagh River. The village is also home to historic woodlands visible in 1830's Ordnance Survey maps, including lands adjacent to the former site of the historic St. Ann's Hydro. Historic woodland groupings are also located on lands near the national school and the existing treeline along the former Muskerry tram line.

<sup>&</sup>lt;sup>5</sup>Champion trees are defined as individual trees which are exceptional examples of their species because of their enormous size. Both trees are included in the included Champion Tree Register of Ireland.

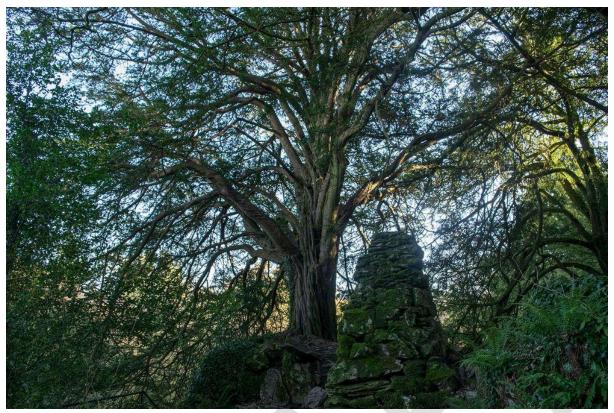


Figure 1 The "Witch's Yew Tree" at Blarney Castle Estate was a finalist in European Tree of the Year 2020

# Hinterland (2021 Canopy Cover: 12%)

2.18

The Hinterland is predominately characterised by open pastures and cultivated fields in agricultural use. While the hinterland includes some commercial coniferous plantations, most woodlands in the area are broadleaved. The 2010 <u>Provisional National Inventory of Ancient and Long-Established Woodland</u> identified groups of older woodlands in the vicinity of Blarney and Tower, near the banks of the Shournagh River. There are further small pockets found along the River Lee. While many trees within the hinterland are significant for biodiversity, these older woodlands are considered particularly important.

The Hinterland also contains an estimated 1,400 km of hedgerows<sup>4</sup>, which form boundaries between fields and provide important ecological corridors. Some of these hedgerows, particularly those planted along townland boundaries, may contain the remnants of older woodlands. [9]

## **Changes in Canopy Cover**

2.19

As of this strategy, Cork City Council has analysed tree canopy coverage and tree location data within the city from 2018 and 2021. Overall, the city experienced a slight canopy loss during this period, dropping from 13.8% in 2018 to 13.4% in 2021. A breakdown of the changes to canopy coverage within city subareas is shown in Figure 2. 8. The amount of tree canopy cover held steady between 2018 and 2021 in the hinterland. However, there was a loss of tree canopy across in the city centre, the city suburbs and in the urban towns.

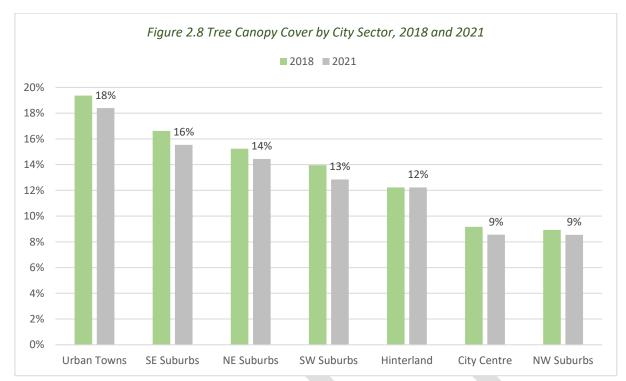
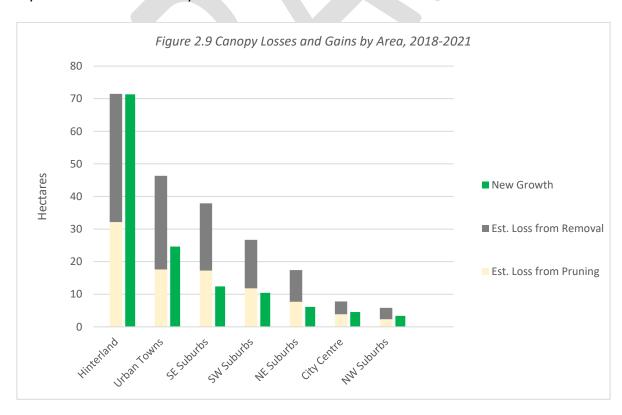


Figure 2.X

## 2.20

An assessment of net canopy coverage loss was also carried out as part of this strategy. Net tree canopy loss occurs when new canopy growth is not enough to counterbalance the canopy losses that occur due to either the pruning or complete removal of trees. Figure 2.9 shows the estimate of growth compared to loss for the city subareas within the city.



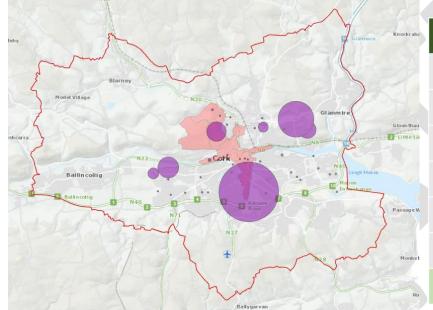
#### 2.21

Initial data analysis indicates that the single largest category of canopy loss was the cumulative impact of removal and pruning in residential gardens. There are many reasons this might have occurred, including storm damage, tree disease, trees reaching end of life, addressing impacts on amenity (e.g., loss of light) or liability concerns. Analysis indicates that the second largest area of canopy loss related to road verges. The third largest area relates to removal associated with land development.

#### 2.22

Since 2021 Cork City Council has planted an additional +8,000 trees in parks, open spaces, and greenways. Some replacement planting has also occurred to replace trees removed due to infrastructure works. A breakdown of this planting is given in Figure 2.10 below. While a precise figure is not available, community groups have also planted thousands of trees in this time frame, on both public and private lands.

Figure 2.10 City Council Planting in Parks and Open Spaces



PLANTING 2021 – Spring 2023		
City Sector	No. Trees	
South East City Suburb	2,836	
North East City Suburb	2,785	
South West City Suburb	1,421	
North West City Suburb	914	
City Centre Neigbhourhood	174	
Total to Date	8,130	

# **Chapter 3 Approach and Guiding Principles**

# **Key Findings from Baseline Assessment**

3.1

- Trees are a critical part of city infrastructure that are integral to the development of a healthy and resilient city. They are an asset, which require investment.
- Trees in cities face several challenges, including competition for space, poor design and planting practices, and insufficient after care.
- Tree canopy cover is a general indicator of the benefits provided by trees. Cork City had 13% tree canopy cover in 2021, a slight loss since 2018.
- Privately owned trees are an important part of Cork's tree canopy cover, as only 17% of Cork City's tree canopy is managed by Cork City Council.
- For human health and wellbeing, some trees need to be integrated into our immediate surroundings, where they are a visible part of our daily lives. In addition, more extensive networks of trees in corridors and woodlands are also needed to provide habitat, ecological services, and/or recreation.
- Trees canopy is not evenly distributed, with some neighbourhoods having tree canopy coverage rates that are significantly lower than the citywide average.

## **Approach**

3.2

This Tree Strategy will be prepared with a short-term horizon--through 2028—to align with the 2022-2028 City Development Plan. While this strategy aims to increase tree canopy cover by 2028, no quantified canopy target will be set at this time, as doing so would be arbitrary. Further information on the profile of existing trees must be collected and considered to set an ambitious, yet realistic, target. Approaches set out in this strategy will be further refined over the next five years, and an updated Tree Strategy with a long-term horizon will be built upon the foundation provided by this initial tree strategy.

3.3

With these considerations in mind, Cork City's broad strategy to increase tree canopy cover in the city is to:

- 1) **Manage:** Provide proactive Tree Care & Management for public trees and encourage the same for private trees; (Chapter 4)
- 2) **Retain:** Retain existing trees and integrate them into the built environment wherever feasible (*Chapter 5*)
- 3) Plant New Trees: Incorporate more trees into existing built-up areas, especially in areas with the lowest tree canopy cover. Plant new trees as part of new development and develop a strategy for the creation of more woodlands and ecological corridors. (Chapter 6)
- 4) **Plant for Longevity:** Adopt and implement the 'right tree, right place' approach to tree planting. (Chapter 7)
- 5) **Collaborate:** Work together as a community to plant, care for, and manage trees. (Chapter 8)
- 6) **Monitor:** Track and monitor both the changes in tree canopy cover and the implementation of actions set out in this plan. *(Chapter 9)*

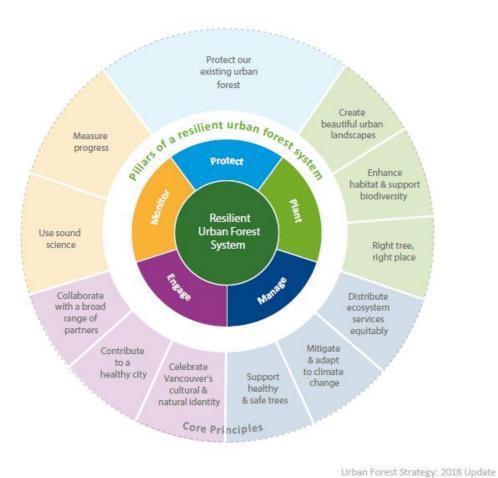


Figure 2 This is from the Vancouver Strategy; one of the infographics to be replicated for Cork

# **Chapter 4 Public Tree Management**

While planting new trees is often the first thing that comes to mind in respect of a tree strategy, ensuring that existing trees are well maintained and healthy is a foundational first step.

## **Overview of Public Management Strategy**

4.1

Cork City Council will:

- 1) Follow agreed public tree management policies and standards
- 2) Develop a baseline inventory of publicly managed trees
- 3) Establish Strategic Annual Tree Works and Planting Programmes
- 4) Take a balanced and proportionate approach to risk management in relation to trees
- 5) Remove trees only in specific circumstances
- 6) Identify and address the impacts of pests and disease

## **Public Arboricultural Management Standards**

4.2

Arboricultural works to public-owned trees are the responsibility of multiple directorates and sections within Cork City Council. To provide consistency, efficiency, and professionalism of tree management, all tree management of Cork City Council-owned trees will be carried out in accordance with *Cork City Council Public Tree Care Policies and Management Standards*, as set out in Appendix 1 of this Strategy.

**Internal Policy:** Any work to Cork City Council owned trees will be carried out in accordance with details set out in *Cork City Council Public Tree Care Policies and Management Standards*.

## **Tree Inventory and Data Tracking System**

4.3

Cork City Council currently has limited records in relation to City Council-owned trees. Similar to human medical records, having details of a tree's species, health, age, and other factors can help systemically plan for trees' preventative and pro-active care. Information such as species and age diversity also provide strategic guidance for new tree planting. Developing a tree inventory is a foundational step towards a Strategic Tree Works and Planting Programme.

#### Action

**Action 1:** Procure a GIS-based tree management system and develop a baseline inventory of Cork City Council-owned trees.

#### **Strategic Tree Works Programme**

4.4

Developing a tree inventory will facilitate a strategically planned annual Tree Care Works Programme. A strategic Works Programme is beneficial for human safety, for trees, and for overall effectiveness. For people, trees that may pose greater hazards to public health can be addressed as a priority. For trees, the early identification of defects/issues can also prevent a situation in which a tree would require removal. This reduces cost, visual impacts from tree loss, and loss of canopy cover. The public can also log requests for Cork City Council to carry out works to Cork City Council trees through the City Council Customer Service Request System. Any requests for tree works will be assessed and in accordance with policies set out in the City Council Public Tree Care Management Standards.

**Internal Policy:** Cork City Council tree work will be prioritised and carried out according to identified hazard or risk, as established in the Cork City Council Public Tree Care Management Standards.

**Action 2:** Establish a strategic Annual Tree Works Programme, based on a 'Work Priority' and coded reinspection system.

4.5

Cork City Council will establish a targeted Strategic Annual Tree Planning Tree Planting Programme that sets out all tree planting that is planned for the coming year, to ensure that tree planting is as efficient and beneficial as possible.

#### Action 3. Establish a programme of targeted Strategic Annual Tree Planting

4.6

Increased tree planting, scheduling of works and ongoing general maintenance will inevitably lead to an increased workload in respect of tree management that will need to be taken int account in budgets and staff resources.

**Action 4:** Incorporate increased public tree planting, establishment, and maintenance costs into asset management, capital, and operational budgets.

**Action 5:** Continue upskilling Cork City Council arboricultural staff, including in tree inspections and tree work specifications.

#### **Tree Risk Management**

4.7

It is both normal and natural for trees to lose branches or to fall, and Cork City Council has a duty of care to ensure that members of the public and staff are not put at risk due to any failure to take reasonable precautions to ensure safety. However, it is important to remember that the actual risk to human safety from trees is very low. In fact, one UK study concluded that the risk of death caused by a tree was around 1 in 10 million. For context, the same study estimated the risk of death from road traffic accidents at 1 in 16,800. Non-fatal injuries from trees were also found to be low. In the study, trees accounted for 55 Accident & Emergency cases per year. Wheelie bins posed more of a risk, accounting for 2,200 A & E cases. [10]

Cork City Council's management of trees will be balanced and proportionate to the actual risks from trees, and in balancing tree risks and benefits Cork City Council will:

- Manage the risk of significant injury or property damage to levels that are as low as reasonably practicable.
- Operate a system of proactive and reactive tree inspections.
- Maintain a detailed record of trees and inspections.
- Ensure that suitably qualified and competent arborists carry out tree inspections and any subsequent tree works in compliance with industry best practice.
- Ensure that any tree works are carried out within the appropriate timeframe.

**Internal Policy:** Cork City Council's management of trees will be balanced and proportionate to the actual risks from trees, and in balancing tree risks and benefits.

**Action 6:** Develop a Tree Safety Management Policy to ensure public trees are inspected and managed in accordance with best practice.

#### **Public Tree Removal**

4.8

Cork City Council has a duty to manage its tree population for the benefit of the wider community and in accordance with good arboriculture practices. Tree removal will be a last resort option after all alternative solutions have been explored. Public tree removal will only be considered in the following circumstances:

- a. Safety Hazard: A suitably qualified and experienced arborist tree determines that a tree is dead, dying or is considered hazardous due to its poor structural and/or physiological condition. Note that, in some instances, a tree may still appear healthy above ground, but a hazardous condition may exist below ground that necessitates removal. Cork City Council also recognises that trees which are considered hazardous may also be very important for biodiversity. Where appropriate--such as in large open spaces and parks--alternatives such cordoning off the area around a tree will be explored.
- **b. Diseased:** A suitably qualified and experienced arborist has diagnosed a tree with a disease and recommended its removal.
- c. **Poorly Established:** A tree that is poorly established is unlikely to have a long life and provides limited ecosystem-service value. Generally, it is more appropriate to remove and re-plant with a tree which has the potential to have a long-term positive impact. Given the time frame it takes a tree to reach maturity, delaying the removal process can negatively impact on the city's overall canopy cover.
- **d.** Causing Structural Damage: Instances where a tree that has been proven to be causing significant structural damage that cannot be resolved through reasonable alternative solutions.
- **e.** Unavoidable Loss to Facilitate Significant Development: A tree that cannot be integrated into the design of significant building/infrastructural works and whose ecological, health, cultural, and monetary value is assessed as having a relatively lower overall value than the works themselves. Such assessment will require a report from a suitably qualified and experienced arborist.

**Internal Policy:** Public trees will only be removed as a last resort option after all alternative solutions have been explored; removal will only be considered when a tree is a safety hazard, is diseased, is poorly established, is causing structural damage that cannot be resolved through reasonable alternative solutions, or whose loss in unavoidable to facilitate significant development and whose value is assessed as having lower overall value than the works themselves.

Further details related to tree removal in respect of development or infrastructure works are addressed in Chapter 5.

## **Pests and Disease**

4.9

Identifying and addressing the current—and potential—pests and diseases impacting trees is also a key part of tree management. For example, several of the native woodland habitats within Cork are ash woodlands, and 'ash dieback,' a disease caused by a fungal pathogen, will likely have a significant impact on in Cork City in coming years. A plan for managing the impact of ash dieback is required.

**Action 7.** Prepare a plan for dealing with impact of Ash dieback.

# **Chapter 5 Retaining Existing Trees**

Retaining existing trees where possible is significant for tree canopy cover, as studies indicate that existing, healthy, mature trees provide twelve times or more benefits than newly planted trees. [11]

#### **Overview of Retention Strategy**

5.1

To retain and protect existing trees, Cork City Council will:

- 1) Integrate existing trees into new development wherever possible.
- 2) Protect existing trees during site works, including works on underground and overhead utilities.
- 3) Encourage stewardship of private trees (see Chapter 8, Collaboration)
- 4) Use regulatory protection where necessary.

# **Integrate Trees into New Development**

5.2

The strong growth of the city requires new infrastructure and large residential developments, which must be accommodated as much as possible within the existing footprint of the city and new expansion areas. This will require some tree removal. However, trees are also a critical form of city infrastructure, the significant benefits and economic value of which are outlined in Chapter 1.

Given this, Cork City Council is committed to ensuring that trees are given adequate consideration at all stages of the private and public development process, from feasibility stage to post completion management. The approach set out below provides further details to help achieve objectives for tree protection as set out in the Cork City. Current objectives regarding tree retention in the <a href="Cork City Development Plan">Cork City Development Plan</a> 2022-2028 are summarised in Figure 5.1.

#### Figure 5.1 Summary of Cork City Development Plan 2022-2028 Objectives for Tree Retention

In respect of tree retention and land development, the Cork City Development Plan 2022-2028 includes the following retention objectives:

- A presumption against development for some woodlands and significant groups of trees with the zoning objective 'Landscape Preservation Zone (ZO 17)'.
- An objective to support the retention of existing trees and the planting of new trees as part of new developments (Objective 6.5d) and
- An objective to discourage development proposals necessitating the removal of extensive amounts of trees or hedgerows (Objective 6.9).

The text of the plan further establishes that mature trees and hedgerows shall be identified at the initial stages of the planning process and used to guide site layout and design (Para. 11.212) and that all development proposals are expected to avoid adverse impacts on mature trees (Para 11.224).

# **Consideration at Start of Design Process**

5.3

The Cork City Development Plan (Para. 11.224) establishes that mature trees and hedgerows shall be identified at the initial stages of the planning process and used to guide site layout. To make these considerations consistent and efficient in the development process, Cork City Council will require Tree Surveys and subsequent assessment of existing trees to be prepared in accordance with British Standard 5837: 2012 'Trees in relation to design, demolition and construction—Recommendations' as prepared by a

suitably qualified and competent arborist. This will apply both to City Council projects and in respect of the assessment of planning applications. Guidance Notes to aid implementation will also be developed.

Internal Policy: Cork City Council will consider trees at the initial stages of design by following Tree Survey and assessment standards set out in British Standard 5837: 2012 'Trees in relation to design, demolition and construction—Recommendations' (or any subsequent updates) in respect of the design of Part 8 development proposals, as prepared by a suitably qualified and competent arborist. The same standard will also be incorporated into the assessment of private development proposals through the Development Management process.

**Action 8:** Develop a guidance note related to tree and hedgerow surveys and the integration of trees and hedgerows into development proposals.

# Mitigation for Unavoidable Removal

5.4

In cases where the removal of trees is permitted to facilitate necessary building/construction works, replacement planting may need to occur offsite. To ensure effective replacement planting, details of a Tree Replacement Standard will be prepared.

**Internal Policy:** Where trees are removed by Cork City Council replacement trees will be planted to mitigate the ecosystem service value that has been lost.

**Action 9.** Develop a Tree Replacement standard to guide mitigation planting, including a tree valuation methods for compensatory / replacement planting such as Cavat or iTree.

**Action 10.** Develop mitigation guidance in respect of the development management process.

# **Protection of Trees During Construction Works**

5.5

Protection of existing trees and hedgerows during the construction process is a crucial part of the development process; a tree that has taken many decades to reach maturity can be damaged irreparably in a few minutes through poor construction practice. Section 11.124 of the Cork City Development Plan establishes that a bond or cash lodgement may be required to ensure the protection of trees until a development has been satisfactorily completed. To ensure adequate tree protection during construction works, tree Protection methods outlined in BS 5837:2012 will be required; guidance notes to aid implementation will also be developed.

**Internal Policy:** Cork City Council will require tree protection in accordance with standards set out in British Standard 5837: 2012 (or any subsequent updates) for Part 8 projects and for any other construction worked carried out by or on behalf of Cork City Council. The same tree protection standards will also be incorporated into the assessment of private development proposals through the Development Management process.

**Action 11:** Develop a guidance note to aid the implementation of tree protection during site works.

#### **Utilities**

5.6

Installing and maintaining services such as water, gas, electricity, and cable is vital to any city. However, such works must be carried out with consideration, or they can severely damage or even kill trees. Cork City Council currently attaches conditions to Road Opening Licenses to ensure that trees are protected during utility works. Cork City Council will develop protocols for addressing trees and utilities and will further establish a process for seeking damages in the event of loss or damage to public trees that result from utility works.

**Internal Policy:** Cork City Council will seek damages in the event of loss or damage to public trees that results from utility works.

**Action 12:** Develop protocols for dealing with trees and utilities in consultation with the main utility providers to ensure utility companies protect existing public trees when undertaking works.

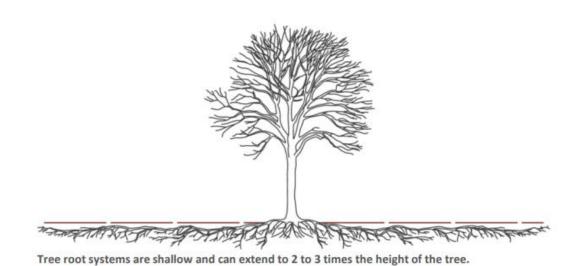


Figure 5.2 Sample illustration; A tree that has taken many decades to reach maturity can be damaged irreparably in a few minutes by the wrong actions during utility or construction works.

#### **Regulatory Protection**

5.7

There are three key types of regulatory protection for trees in Cork City: consideration under planning processes, Felling Licenses, and Tree Preservation Orders.

# **Planning Process**

5.8

Planning applications that may impact trees are assessed by objectives set out in the Cork City Development Plan. Some significant tree stands are within areas zoned "Landscape Preservation Zones," where there is an objective to preserve and enhance landscape character. There is a presumption against development within these areas. Some planning applications are also subject to the Environmental Impact Assessment (EIA) and

Appropriate Assessment (AA) processes.<sup>6</sup> The planning process also recognises the ecological value of proposed Natural Heritage Areas (pNHAs).<sup>7</sup> In Cork City, woodland pNHAs include the Lee Valley, Shournagh Valley, Blarney Castle Woods, Glanmire Wood, and Ardamadane Wood.

#### **Felling License**

5.9

Cutting down a tree in a forest and other specified locations within the 'Expansion Area' (i.e., areas that were previously part of the Cork County Council administrative area as shown in Figure 5.3) requires the grant of a Tree Felling License from the Department of Agriculture, Food, and the Marine. Details on when a Felling License is required are available on the <u>Department Website</u>.<sup>8</sup>

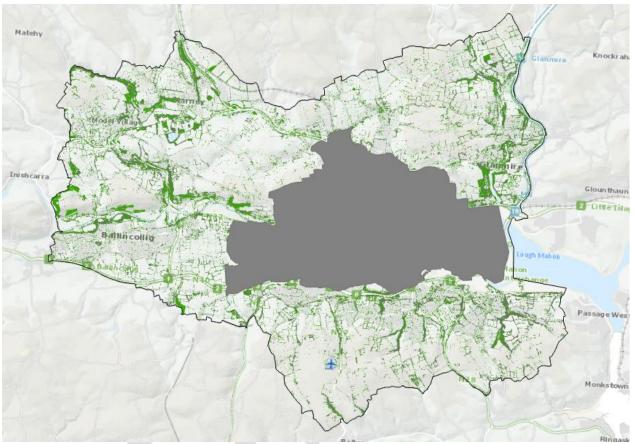


Figure 5.3 A 'tree felling licence' from the Department of Agriculture, Food and the Marine is required to cut down a tree in a forest or other specified locations within in parts of Cork City that are not greyed out in the map above.

<sup>&</sup>lt;sup>6</sup> More details on EIA and AA are available in Section <u>11.23 and 11.24</u> of the Cork City Development Plan.

<sup>&</sup>lt;sup>7</sup>NHAs are a basic designation for areas that are considered important habitats or that hold species of plants and animals whose habitat needs protection. In 1995 a number of areas were proposed as NHAs Many of these areas have not been officially designated as NHAs to date but are noted in planning and licencing processes. More details are available at <a href="https://www.npws.ie/protected-sites/nha">https://www.npws.ie/protected-sites/nha</a>

<sup>8</sup> https://www.gov.ie/en/publication/19b8d-tree-felling-licences/

#### **Tree Preservation Orders**

5.10

The second tool for Tree Protection is Tree Preservation Orders or 'TPOs'. At present, there are 12 no. Tree Preservation Orders in Cork City (See Figure 5.4). TPOs can require the tree owner to seek permission from Cork City Council before cutting down or pruning the protected tree(s). Anyone who breaches a TPO can be prosecuted, and the prosecution can result in a fine. In practice, the maximum fines in most prosecution cases taken by the Local Authority are considerably less than the value of the protected tree(s) themselves or the land in which the trees are planted. Furthermore, legislation does not provide enabling provisions to require replacement planting.

The Cork City Biodiversity and Heritage Plan (Action 2.7) includes an action to investigate mechanisms to protect non-designated areas of biodiversity value, ecological corridors, and trees on land in private ownership. The potential for making tree protection by-law, as some cities such as Vancouver, British Columbia have done, has been considered. However, there appears to be no current national legislation to enable such by-laws. Investigations of protection approaches continues. In the interim period, Cork City Council will commence the use of Tree Preservation Orders and review their effectiveness.

**Action 13.** Pilot the making of additional Tree Preservation orders where appropriate and subsequently review their effectiveness.

**Action 14**. Continue investigation of mechanisms to protect non-designated areas of biodiversity value, ecological corridors, and trees on land in private ownership; champion stronger national enabling legislation in respect of tree protection if necessary.

<sup>9</sup>Local Authority's power to make Tree Preservation Orders is set out in Section 205 of the Planning and Development Act, 2000 (as amended). There is no requirement for a felling license in the Cork City Council administrative area because it is legally defined as an "urban area.")

Figure 5.4 Tree Preservation Orders in Cork City

Irish Distilleries, North Mall

Westboro, Middle Glanmire Road

Lakeview, Castle Road

Belgrave Square, Wellington Road

Ringmahon Road

Roseville, Old Youghal Road

Springmount

Rockmahon, Castle Road

Brookfield House (Village), College Road

Deerpark, Greenmount

Ardnalee, Middle Glanmire Road

Castletreasure, Douglas

# **Chapter 6 Locations for New Tree Planting**

#### **Overview**

6.1

Where can we plant new trees in Cork City? This chapter sets out policies and actions to enable considered tree planting over the medium to longer term, including:

- Planting more trees in existing built-up areas
- Ensuring new tree planting is an integral part of new development
- Developing a framework plan for creating larger tree corridors and woodlands

# **Existing Built-Up Areas**

6.2

Within existing built-up areas, Cork City Council will increase tree cover on publicly owned land through:

- 1) Continued planting in parks and public open space.
- 2) Designing tree planting into planned public realm and sustainable transport projects.
- 3) Placing particular emphasis on new planting in the lowest canopy cover neighbourhoods.

#### Cork City Council will also:

- 4) Explore the potential of a planting programme for street trees and road verges.
- 5) Encourage, facilitate, and support tree planting on private land (see Chapter 8).

Details are set out below.

## **Planting in Parks and Open Spaces**

6.3

Cork City currently has over thirty parks, totalling over 283 hectares of parkland. An additional 2,665 hectares of land are zoned Public Open Space within the Cork City Development Plan 2022-2028. Cork City Council has planted nearly 6,500 additional trees in parks and open spaces since 2021. Many parks have adequate space to accommodate additional trees while still retaining an open character suitable for other amenity uses. The same is true for the boundaries of some sports grounds.

## **Public Realm Upgrades/Sustainable Transport Schemes**

6.4

New tree planting will be included in public realm and other infrastructure projects wherever feasible. The South Main Street public realm works will start construction soon, and several additional infrastructure projects are also in the planning stages. Tree pits also provide opportunities to incorporate Sustainable Urban Drainage (SUDs); a pilot project incorporating tree planting and SUDS into a public realm project will be an objective of this strategy.

**Action 15.** Develop a pilot project incorporating tree pits providing Sustainable Urban Drainage into the public realm.

# **Emphasis on Lowest Canopy Cover Neighbourhoods**

6 5

The neighbourhoods with the lowest tree canopy cover are set out in Figure 6.1 (see also Figure 2.7). These areas will be given extra emphasis in respect of new tree planting. It is noted that some of the lowest canopy cover neighbourhoods (such as South Parish and the City Centre) have a high level of paving and limited planting space, so each area will need its own consideration and approach. The Knocknaheeny

<sup>&</sup>lt;sup>10</sup> Details are available on the City Council Sustainable Transport Scheme web page.

neighbourhood has some of the lowest tree canopy cover in Cork City. One project currently underway to address this is taking place as part of the City Northwest Quarter Regeneration. The regeneration project is envisaged to deliver 650 new homes, seven new neighbourhood green spaces, and new streetscapes including new trees. Through the EU project GreenInCities, tree planting and greening plans for the area will be designed in collaboration with the community.

Figure 6.1 Neighbourhoods with Lowest Tree Canopy Cover, 2021

Neighbourhood	Percent Canopy Cover
North City Docks	1%
Churchfield / Gurranabraher	5%
Knocknaheeny	5%
South Parish	6%
City Centre	6%
Turners Cross	8%
Fairhill	8%
Blackpool	8%
Shandon / Fairhill	8%

**Action 16.** Explore options, in collaboration with the community, for incorporating more trees in neighbourhoods with the lowest canopy cover.

#### **Street Trees and Road Verges**

6.6

Cork City currently has over 7,000 street trees, as well as significant additional tree coverage located along national road corridors. In addition to the incorporation of new street trees into planned public realm upgrades, Cork City Council will investigate the potential of developing a stand-alone street tree planting programme. Incorporating a significant number of street trees outside of a major public realm upgrade is not without challenges, including:

- The density and configuration of services under the footpath (ducting, water pipes, etc.) and/or cellars or culverts may make retrofitting tree pits infeasible in some areas.
- Retrofitting tree pits in footpaths can be expensive, with an average cost of €10,000 per tree based on recent projects in Dublin and Fingal.
- Many existing footpaths are not wide enough to include both an appropriate-sized tree pit and space for pedestrians. However, conversion of parking spaces could be considered in some instances; see Figure 6.3).

#### **Action 17.** Explore the potential for incorporating additional street trees.

6.7

The Cork City Green and Blue Infrastructure Study (April 2022) further notes that the verges of major roads, such as the N22, N27 and N20 should be assessed for additional new planting opportunities. While traffic safety and sightlines must always be accounted for, recent examples from other EU countries may serve as replicable models (see Figure 6.4).

**Action 18.** Explore potential for further tree planting in verges of major roads.



Figure 6.2 Underground services on MacCurtain Street limited the area available for tree planting



Figure 6.3 A parking space conversion in Dublin 8 (Photo credit @libertiesdublin)



Figure 6.3 Recent 'microforest' planting adjacent to a ring road in Paris (Photo credit: <u>Reasons to Be Cheerful</u>)

## **Tree Planting in New Development**

# **Major Infrastructure Projects**

6.8

The Cork City Development Plan (2022-2028) includes objectives for 18 city-level Green and Blue infrastructure projects. This includes three projects where significant new tree planting will be delivered: two new regional parks (North West and North East) and the Lee to Sea Green Route (a major greenway with potential for riparian woodland planting). These projects are currently in the early stages of planning. New

tree planting will also be incorporated into the design of new roads and streets, including the Northern and Southern Multi-Modal Distributor Routes.

**Internal Policy:** New tree planting will be included in the design of new roads, streets, and public realm upgrades wherever feasible.

#### **Development Management**

6.9

Objective 6.5 of the City Plan supports the planting of new trees as part of new developments. The City Plan further establishes that all development proposals are expected to consider the design of space for trees and other greening at the earliest stage (Section 11.9) and to integrate provision for biodiversity enhancement, including areas of native tree planting (Section 11.224). To help implement these objectives, Cork City Council will prepare more specific guidance notes in respect of new tree planting proposals for use in the development management process.

**Action 19**. Prepare guidance notes to aid the design of new tree planting as part of the Development Management process.

# **Development of Corridors and Woodlands**

6.10

The Cork City Biodiversity and Heritage Plan includes a commitment to restore and plant native trees on public land and to restore and expand woodlands (Action 1.14). The Draft <u>Cork City Climate Action Plan</u> also includes an action to identify and purchase suitable land for sustainable woodland creation (Action 5.1). Furthermore, access to nearby woodland is acknowledged as important for human recreation and well-being. Given these benefits, the establishment of additional woodland is recognised as a priority.

Action 20. Explore sites suitable for the expansion of existing woodland and creation of new woodland.

## **Ecological Corridors**

6.11

The Cork City Habitat Study is currently underway. Amongst other things, the study will help identify important ecological corridors. Ecological corridors may include areas such as hedgerows, treelines, scrub, wetlands, and river banks and valleys. For example, the rivers and streams in the Cork City Council area are shown in Figure 6.4. In addition to the River Lee, there are eighteen smaller rivers and several streams flowing through the Cork City area. Trees located within these settings can often help stabilise riverbanks, reduce flooding, and improve water quality. However, it is also important to note that the Habitat Study may also identify some existing high value habitats (such as unshaded riverine areas), where further extensive tree planting may not be the best solution. The findings of the Habitat Study will feed directly into any tree planting plans in ecological corridors. It is also important to note that several riverbanks and other areas that form ecological corridors are in private ownership, so creating connectivity would require a partnership approach, community buy-in, and collaboration.

**Action 21.** Explore the potential for more riparian and other ecological corridor planting, taking the findings of the Cork City Habitat Study into account.

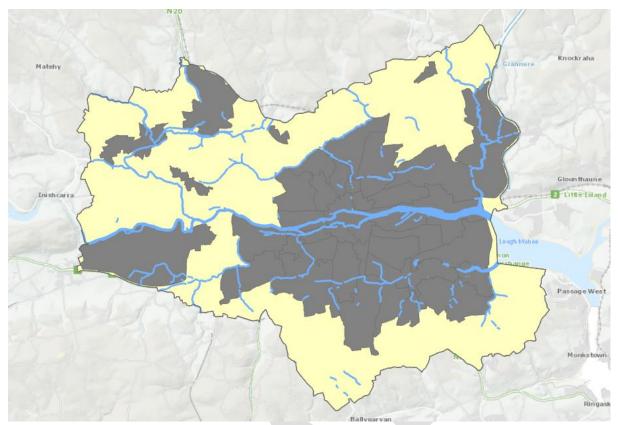


Figure 6.4 . In addition to the River Lee, there are eighteen smaller rivers and several streams flowing through the Cork City area.

# **Chapter 7 Design, Planting, and Aftercare**

Careful design, planting and aftercare will ensure that trees that are planted are long-lived and have a long-term impact on the city's canopy cover.

#### **Species Mix**

7.1

Ireland has 28 native tree species, with nine species being the most common.<sup>11</sup> With increased realisation of the importance of biodiversity, some now advocate planting solely native trees. Cork City Council supports this approach in rural settings and in areas of higher biodiversity. However, the Council supports diverse planting that includes a mix of native and appropriate non-native species in heavily urbanised environments, such as street trees and some parkland settings. A wide range of species is vital to the long-term stability of the city's urban tree population. A wide species mix buffers against host-specific pests and disease and the potential loss of large numbers of trees within a short period. This is particularly important with changes in weather patterns associated with climate change. Increasing the diversity and the variety of trees planted enhances the resilience of the urban tree population.

**Internal Policy:** Cork City Council will plant and support the planting of native species in rural settings and areas of higher biodiversity and will plant and support a mix of native and appropriate non-native species in heavily urbanised environments, such as for street trees and some parkland settings.

## **Right Tree, Right Place**

7.2

Cork City Council supports the maxim "Right tree, right place." If the needs of the tree are not matched to the location in which it is planted, it can result in both poor tree health and conflict with surrounding landuse. These, in turn, can lead to increased maintenance requirements, decline in tree health, and in the longer term, removal of the tree. Some examples of "wrong tree, wrong place" include trees that:

- are invasive species (e.g., Cherry Laurel (*Prunus laurocerasus*) and Rhododendron ponticum);
- may impact biosecurity by introducing fungus, pests, or other biological threats;
- cannot thrive in the environmental conditions in which it is planted such as wrong soil type, too exposed, too wet, etc. for the tree species;
- do not have adequate soil space to establish a healthy root system;
- do not have enough space to grow into, likely bringing the tree into conflict with other uses and development around it when it reaches maturity;
- are too small to provide a sense of scale or maturity in new developments;
- have thorns or have poisonous fruit or bark and are planted where they could cause harm to humans or pets; or
- are overplanted in areas that are already valuable to biodiversity, such as species-rich grassland or wetlands.

**Action 22.** Develop guidance notes—including links to existing Irish resources—to encourage 'Right Tree, Right Place' and appropriate species planting.

#### Soil

7.3

Healthy soil is vital for healthy tree growth. Trees extract nutrients from soil with the assistance of fungi and other microorganisms living in the soil, and these microorganisms need organic matter and an air supply to

<sup>&</sup>lt;sup>11</sup> https://www.treecouncil.ie/native-irish-trees

survive. To provide these conditions, soil decompaction and/or amendments such as compost may be necessary prior to tree planting. In addition, street trees and other trees planted in hard surfaces need special consideration, including modern tree pits with adequate soil volumes.

**Internal Policy:** Soil and tree pits for public tree planting will be in accordance with the <u>European Tree</u> <u>Planting Standard</u>. This standard will also be applied through the development management process and encouraged in all community and private planting initiatives.

#### **Planting Standards**

7.4

Tree planting in Cork City shall take place in accordance with current industry standards, including the following:

- European Tree Planting Standard, including Section 5 (Standard Planting Procedure) and Section 6 (Additional Technical Solutions)
- BS 3936-1:1992 Nursery stock specification for trees and shrubs.
- BS 4043:1989 Recommendations for Transplanting Root-Balled Trees
- BS 4428:1989 (Section 7) Recommendations for General Landscape Operations
- BS 8545:2014 Trees: from nursery to independence in the landscape

**Internal Policy:** Public tree planting will be in accordance with current industry standards. These standards will also be applied through the development management process and encouraged in all community and private planting initiatives.

## **Adequate Aftercare**

7.5

Care and maintenance of young trees is vital. Trees are at their most vulnerable when first planted and are more likely to die in the first five years than at any other time in their life. The first ten years after planting are the most challenging for tree establishment. Initiatives which primarily focus on increasing tree numbers generally do not have a positive impact, as insufficient resources are available for aftercare and most trees planted do not survive and thrive. A qualitive approach to tree planting is proven to have the best outcomes.

**Internal Policy:** Cork City Council will adopt a qualitive approach to public tree planting that focuses on planting the numbers of trees that can be managed within the resources available, to ensure that trees establish and to provide longevity.

# **Chapter 8 Community Collaboration**

Trees play a vital role in our ecosystem, making them an important asset that we need to protect and maintain as a community. Trees go beyond personal land ownership in the role they play for the entire society, in themselves and as green networks.

## **Collaboration Strategy**

8.1

Cork City Council will:

- 1) Communicate with communities on tree planting and management in their areas.
- 2) Actively encourage and facilitate the involvement of community groups, schools, clubs, and other stakeholders in the promotion, planting, and care of trees.
- 3) Encourage both good tree management and new tree planting by private individuals and businesses.
- 4) Promote good communication and cooperation on tree-related topics between all relevant stakeholders.
- 5) Promote the importance and benefits of trees through education, events, and public engagement.

# **Public Requests to Council Planting Programme**

8.2

Proposals and requests for new tree planting from Elected Members and the public are welcome and will be considered for the planting programme following an assessment to ensure site suitability and subject to available resources. Higher priority will be given to proposals that:

- Are in neighbourhoods with the lowest existing tree canopy cover (as shown in Figure 2.7); and/or
- Complement or build on other placemaking efforts or improvements that are currently being carried out in the area; and/or
- Contribute to objectives set out in the <u>Cork City Development Plan</u>, particularly those related to:
  - Green and Blue Infrastructure objectives
  - Opportunities to enhance biodiversity
  - Active travel routes, particularly toward schools
  - Delivering Nature Based Solutions (NBS) and Sustainable Urban Drainage (SUDs)
  - Areas with lower air quality
  - Urban heat islands

## **Sponsored Tree Planting**

8.3

Cork City Council receives occasional requests to accommodate sponsorship of trees as memorials or to commemorate major life events. Due to potential sensitivities surrounding memorial tree plantings, any development of a scheme for sponsored memorial tree planting in public spaces would have to carefully consider the selection of suitable sites for health and safety and risks of vandalism/damage to the tree.

**Action 23.** Develop a protocol in respect of sponsored tree planting.

#### **Community Groups**

8.4

In recent years community groups have planted thousands of trees in Cork City and have even started small community tree nurseries. There is significant potential for expanding community planting in Cork City, including through local biodiversity/tree groups and through national tree planting programmes (e.g., An Taisce LEAF and Easy Treesie).

In addition to expanding existing community tree nursery and planting initiatives, Cork City Council will explore the feasibility of additional opportunities to collaborate with all community stakeholders on activities such as

- Gathering information about their local trees and engaging in citizen science
- Generating leaf mould and compost to provide healthy soil for tree planting
- Providing aftercare to help establish newly planted trees (e.g., watering)
- Sponsoring or 'adopting' a tree to support tree planting on public land

**Internal Policy:** Cork City Council will actively encourage and facilitate the involvement of community groups, schools, clubs, individuals, business owners, and other stakeholders in the promotion, planting, and care of trees in Cork City.

**Action 24.** Explore the feasibility of facilitating additional community-based tree initiatives.

**Action 25.** Explore opportunities to partner with companies and other entities for Corporate Social Responsibility initiatives involving tree planting.

#### **Individual Landowners**

8.5

Recognising the significant contribution that privately owned trees have for the city's tree canopy cover, Cork City Council will also engage with private landowners. Two notable opportunities include

- With over 60,000 residential gardens in Cork City, there is significant potential for expanding canopy cover through cumulative planting efforts and through encouraging best practice management of existing trees (e.g., pruning practices).
- Several significant woodlands are in private ownership.

**Action 26.** Develop guidance notes and other supports to encourage and facilitate individual household tree planting and best practice tree management and care.

**Action 27.** Explore ways to collaborate with woodland owners on best practice management.

### **Planting on Council Owned Land**

8.6

Cork City Council is open to proposals for community tree planting projects on Council-owned land such as publicly managed streets, roadside margins, and open space. Such proposals will need to align with the principles outlined in Chapter 7. Some initial details to guide community proposals are provided in Appendix 3, and further guidance notes will be developed.

**Action 28:** Further develop guidelines community groups can use to design and seek approval for tree planting proposals on Council owned land.

## **Information Sharing**

8.7

Cork City Council will also engage with the community through information sharing, including:

A dedicated tree webpage including Frequently Asked Questions and neighbourhood level tree data

• Development of a public Tree Removal Notification System to inform the public of the reason for any tree felling.

Action 29. Create a dedicated tree webpage on the Cork City Council website.

**Action 30.** Develop protocols for engaging with communities and residents for proposed significant tree management works and works affecting trees.

#### **Raising Awareness**

2 2

Cork City Council will engage with communities and other stakeholders about the value of trees and the services they provide. Cork City Council will continue to organise tree-related events, publications during National Tree Week in Spring, Tree Day in the Autumn and throughout the year where reasonable and feasible.

Where resources allow, further support will be provided for tree-related educational initiatives and events in communities, clubs, schools and third level institutions. Cork City Council will also:

- Review the educational Tree Trails and explore opportunities for their further enhancement
- Estimate annual eco-system services provided by public trees in Cork City.

**Action 31.** Review the educational Tree Trails and explore opportunities for their further enhancement.

Action 32. Develop and publish an eco-system services report for public trees in Cork City.

# **Communication and Cooperation**

8.9

Internally, all City Council tree-related decisions, including issues related to designing or implementing works that affect trees, will be coordinated through the Recreation and Amenity Section of the Operations Directorate from the earliest stages of projects. The Tree Officer and other Recreation and Amenity staff will provide advice or assistance, as appropriate.

Information talks and interdepartmental workshops on the application of the Tree Strategy will be organised to encourage collaboration. The Council will also foster cooperation between external stakeholders on tree-related issues. The Council will continue to be a member organisation of the Tree Council of Ireland, which promotes the planting, care, and conservation of trees in both rural and urban areas.

**Action 33.** Organise internal information talks and inter-directorate workshops on issues related to implementation of the Tree Strategy.

# **Chapter 9 Policy Summary, Action Plan, and Monitoring**

# **Summary of Internal Policies**

8.10

# **Public Tree Care and Management**

No.	Internal Policy		
1	Any work to all Cork City Council owned trees will be carried out in accordance with details set out		
	in "Cork City Council Public Tree Care Policies and Management Standards."		
2	Cork City Council tree work will be prioritised and carried out according to identified hazard or risk,		
	as established in the Cork City Council Public Tree Care Management Standards.		
3	Cork City Council's management of trees will be balanced and proportionate to the actual risks		
	from trees.		
4	Public trees will only be removed as a last resort option after all alternative solutions have been		
	explored; removal will only be considered when a tree is a safety hazard, is diseased, is poorly		
	established, is causing structural damage that cannot be resolved through reasonable alternative		
	solutions, or whose loss in unavoidable to facilitate significant development and whose value is		
	assessed as having lower overall value than the works themselves.		

# **Retaining Existing Trees**

No.	Internal Policy
5	Cork City Council will consider trees at the initial stages of design by following Tree Survey and assessment standards set out in British Standard 5837: 2012 'Trees in relation to design, demolition, and construction—Recommendations' in respect of the design of Part 8 development proposals, as prepared by a suitably qualified and competent arborist. The same standard will also be incorporated into the assessment of private development proposals through the Development Management process.
6	Where trees are removed by Cork City Council replacement trees will be planted to mitigate the ecosystem service value that has been lost.
7	Cork City Council will require tree protection in accordance with standards set out in British Standard 5837: 2012 (or any subsequent updates) for Part 8 projects and for any other construction worked carried out by or on behalf of Cork City Council. The same tree protection standards will also be incorporated into the assessment of private development proposals through the Development Management process.

# **Locations for New Tree Planting**

No.	Internal Policy
8	New tree planting will be included in the design of new roads and streets wherever feasible.

# Design, Planting, and Aftercare

,	55.8.7.1.4.1.1.87.4.1.4.1.5.1.4.1.5	
No.	Internal Policy	
9	Cork City Council will plant and support the planting of native species in rural settings and areas	
	of higher biodiversity and the planting of a mix of native and appropriate non-native species in	
	heavily urbanised environments, such as street trees and some parkland settings.	
10	Soil and tree pits for public tree planting will be in accordance with the he European Tree	
	Planting Standard. This standard will also be applied through the development management	
	process and encouraged in all community and private planting initiatives.	

11	Public tree planting will be in accordance with current industry standards. These standards will		
	also be applied through the development management process and encouraged in all		
	community and private planting initiatives.		
12	Cork City Council will adopt a qualitative approach to public tree planting that focuses on		
	planting the numbers of trees that can be managed within the resources available to ensure		
	that trees establish and to provide longevity.		

# **Community Collaboration**

	•		
No.	Internal Policy		
	Cork City Council will actively encourage and facilitate the involvement of community groups,		
	schools, clubs, individuals, business owners, and other stakeholders in the promotion, planting,		
13	and care of trees in Cork City.		

# **Summary of Actions**

8.11

# **Public Tree Care and Management**

I done	done free care and ivianagement		
No.	Action		
	Procure a GIS-based tree management system and develop a baseline inventory of Cork City		
1	Council-owned trees.		
	Establish a strategic Annual Tree Works Programme, based on a 'Work Priority' and coded		
2	reinspection system.		
3	Establish a programme of targeted Strategic Annual Tree Planting		
	Incorporate increased public tree planting, establishment, and maintenance costs into asset		
4	management, capital, and operational budgets.		
	Continue upskilling Cork City Council arboricultural staff, including in tree inspections and tree work		
5	specifications.		
	Develop a Tree Safety Management Policy to ensure public trees are inspected and managed in		
6	accordance with best practice.		
7	Prepare a plan for dealing with impact of Ash dieback.		

# **Retaining Existing Trees**

No.	Action		
	Develop a guidance note related to tree surveys and the integration of trees and hedgerow surveys		
8	into development proposals.		
	Develop a Tree Replacement standard to guide mitigation planting, including, a tree valuation		
9	methods for compensatory / replacement planting such as Cavat or iTree.		
10	Develop mitigation guidance in respect of the development management process.		
11	Develop a guidance note to aid the implementation of tree protection during site works.		
	Develop protocols for dealing with trees and utilities in consultation with the main utility providers		
12	to ensure utility companies protect existing public trees when undertaking works.		
	Pilot the making of additional Tree Preservation orders where appropriate and subsequently		
13	review their effectiveness.		
	Continue investigation of mechanisms to protect non-designated areas of biodiversity value,		
	ecological corridors, and trees on land in private ownership; champion stronger national enabling		
14	legislation in respect of tree protection if necessary.		

# **Locations for New Tree Planting**

No.	Action	
	Develop a pilot project incorporating tree pits providing Sustainable Urban Drainage into the public	
15	realm.	
	Explore options, in collaboration with the community, for incorporating more trees in	
16	neighbourhoods with the lowest canopy cover.	
17	Explore the potential for incorporating additional street trees.	
18	Explore potential for further tree planting in verges of major roads.	
	Prepare guidance notes to aid the design of new tree planting as part of the Development	
19	Management process.	
20	Explore sites suitable for the expansion of existing woodland and creation of new woodland.	
	Explore the potential for more riparian and other ecological corridor tree planting, taking the	
21	findings of the Cork City Habitat Study into account.	

# **Design, Planting, and Aftercare**

No.	Action
	Develop guidance notesincluding links to existing Irish resources to encourage 'Right Tree, Right
22	Place' and appropriate species planting.

# **Community Collaboration**

COIIIII	offiniturity Conaboration		
No.	Action		
23	Develop a protocol in respect of sponsored tree planting.		
24	Explore the feasibility of facilitating additional community-based tree initiatives.		
	Explore opportunities to partner with companies and other entities for Corporate Social		
25	Responsibility initiatives involving tree planting.		
	Develop guidance notes and other supports encourage and facilitate tree individual household tree		
26	planting and best practice tree management.		
27	Explore ways to collaborate with woodland owners on best practice management.		
	Further develop guidelines community groups can use to design and seek approval for tree planting		
28	proposals on Council owned land.		
29	Create a dedicated tree webpage on the Cork City Council website.		
	Develop protocols for engaging with communities and residents for proposed significant tree		
30	management works and works affecting trees.		
31	Review the educational Tree Trails and explore opportunities for their further enhancement.		
32	Develop and publish an annual carbon sequestration for public trees in Cork City.		
	Organise internal information talks and inter-directorate workshops on issues related to		
33	implementation of the Tree Strategy.		

# 9.3 Monitoring

To ensure implementation of the strategy, Cork City Council will monitor

Indicator	Review Timeframe	
Adherence to 13 internal policies	Annual	
Progress on and completion of the 34 actions	Annual	
Changes in tree canopy cover on a citywide and neighbourhood-	Every 3 to 5 years, based on data	
level basis	availability <sup>12</sup>	

42

<sup>&</sup>lt;sup>12</sup>No annual dataset is currently available.

# **Appendix 1: Cork City Council Public Tree Management Policies**

#### Overview

1.1

Cork City Council will follow the policies, processes, and standards below in caring for trees in its ownership. Establishing a structured approach to the issues affecting public trees provides context to Council actions and decisions, and as a result, allows for consistency, efficiency, and professionalism of public tree management.

#### **Tree Work Standards**

1.2

Tree works will be carried out in accordance with BS 3998:2010 Tree work—Recommendations and/or the European Tree Pruning Standard.

## **Public Requests for Tree Works**

1.3

The public can log requests for Cork City Council to carry out works to Cork City Council trees through the <u>City Council Service Request</u> system. Cork City Council does not carry out works to privately owned trees except in cases where the owner of a privately-owned tree does not act in relation to a tree negatively impacting on the safety of a public area, including streets or footpaths.

1.4

Tree-related emergencies will be attended to immediately. An emergency is defined as a 'tree that is in immediate danger of failure or a tree that is causing an obstruction requiring urgent attention'. A response to non-emergency tree enquiries will be provided within 10 working days of receipt of the enquiry. If a site inspection is considered necessary, an inspection carried out with 28 days. On inspection should the tree be deemed as requiring work it will be added to the City Council tree works programme as described in Paragraph 1.18 (Prioritisation of Tree Works).

#### **Matters Investigated**

1.5

Cork City Council will investigate:

- Potentially hazardous trees
- Trees affecting public access, highway safety and visibility, and streetlights
- Trees hit by vehicles
- Overhanging tree branches where a physical obstruction is caused, such as preventing access
- Potential tree damage to road surfaces or buildings
- Trees encroaching on properties and causing damage

# **Matters Not Investigated**

1.6

Cork City Council will generally NOT investigate

- Loss of light to a property, garden, or solar panels
- Tree 'debris', such as fruits, nuts, seeds, leaves or sap

- Issues caused by bird fouling or bird nesting
- Impacts on satellite, TV, and phone reception
- Issues related to pollens and allergies
- Blocked drains and gutters
- Issues related to the height or size of the tree

1.7

More details on some of these common issues are set out below. While the inconvenience caused to some individuals by these issues is acknowledged, these needs must be balanced against the broader needs of the community at large and the need to safeguard the city's tree canopy for the future.

#### **Shading**

1.8

Trees can often be seen as a contributing factor to blocking light, the extent of which is variable and subjective. Cork City Council will not generally carry out tree works to allow for increased light filtration to address shading of natural light. In severe and unreasonable instances where trees are significantly blocking daylight from habitable rooms, minor pruning works maybe acceptable in some situations; this will be determined a case-by-case basis. The condition of the tree, its ecosystem service value to the community, the orientation of the house, and whether the tree was present when the occupier moved into the property will all be taken into consideration.

#### Falling Leaves/Blossoms

1.9

Cork City Council will not carry out tree works to remove or reduce leaf fall/blossoms or remove fallen leaves from private property. The loss of leaves is a part of a natural cycle for deciduous trees and provides many environmental benefits, particularly to soil condition. Composting of leaves or making leaf mould is encouraged as a way of environmentally recycling this valuable resource, which can provide a host of benefits to both private and publicly maintained plants and trees.

# **Nesting Birds/Bird Droppings**

1.10

Nesting birds are protected under the Wildlife Act 1976 and Birds and Natural Habitats Regulations 2011. Birds are an essential part of many ecosystems and provide a host of ecological benefits. Cork City Council will not carry out tree works to remove or reduce nesting birds or bird droppings.

#### **Fruit and Nuts**

1.11

Cork City Council will not generally carry out tree works to alleviate problems caused by natural and/or seasonal phenomena such as fruit or nuts. Falling fruit, nuts or blossoms are natural and seasonal occurrences and occur for a short period of time each year. Many fruiting trees flower in spring and provide good aesthetic value to the surrounding area. However,

where fallen fruit or nuts is leading to exceptional problems of a severe and unreasonable degree this will be dealt with on a case-by-case basis subject to resources.

## Honeydew/Sap/Resin

1.12

Honeydew is sticky liquid, secreted by aphids and some scale insects that feed on plant sap. Sap has an important role in the transportation of nutrients and water throughout the tree. Resin is used to protect a tree from harmful insects and pathogens. Cork City Council will not carry out tree works to remove or reduce honeydew/sap/resin or other sticky residue from trees.

# **Anti-Social Behaviour and Criminal Activity**

1 12

Members of the public shall contact the Gardaí as a first point of contact in relation to any such concern. In cases where the Gardaí confirm that a City Council tree is enabling criminal activity or anti-social behaviour, measures to reduce the problem will be considered on a site-by-site basis in coordination with the Gardaí and other relevant agencies.

#### **CCTV**

1.14

Cork City Council will not generally carry out tree works to improve CCTV sightlines, except for CCTV associated with the Gardaí, the monitoring of ATMs, and public security. The installation of new CCTV cameras must take into consideration existing trees to prevent requests for unnecessary pruning works or the removal of trees to improve desired sightlines.

#### **Root Encroachment**

1.15

Tree roots in gardens are a natural occurrence, and tree pruning will not reduce root encroachment. In situations where a tree is genuinely generating root encroachment to an exceptional, severe, and unreasonable degree will be dealt with on a case-by-case basis. Tree roots are often perceived as causing structural damage to buildings, boundary walls and other structures. However, most trees growing near buildings cause no damage, and the structural issues are related to inadequate foundation design, general structural failure, poor quality construction, nearby excavations, or major works to adjacent properties.

Property owners alleging structural damage caused by a Cork City Council tree will, at their own expense, be expected to provide evidence from suitably qualified professionals (such as an arborist and engineer) that a tree is causing or has caused damage to their property. Where evidence is provided which demonstrates a Council owned tree is the cause of damage, the Council will take appropriate action on a case-by-case basis. As set out in Paragraph 3.8, tree felling will be considered as a last resort after reasonable engineering alternatives have been appropriately considered (except in cases where the tree is in poor structural or physiological condition).

#### **Overhanging Branches**

1.16

Cork City Council has no legal obligation to prune the branches of public trees that overhang private property, except in instances where a suitably qualified professional deems the tree

branch to be dangerous or considers it to be causing a significant nuisance. Adjacent landowners are entitled to prune encroaching tree branches or roots back to the boundary of their property, provided such pruning does not damage the tree or make it structurally unstable or otherwise hazardous. Any private owner carrying out pruning of overhanging branches should recycle the branches in an appropriate manner; Cork City Council has no legal obligation to collect or accept the cuttings.

## **Public Trees Obstructing Roads, Cycleways and Footpaths**

1.17

Private trees that are impacting on the public road or footpath are addressed by Cork City Council under the Section 70 of the Roads Act 1993. In relation to public trees, where reasonable and feasible, Cork City Council will carry out works to publicly owned trees if the tree is causing an obstruction to roads, footpath or cycleway, public right of way, access to property or public open space.

- Obstructing height clearance: Tree pruning to achieve height clearance is considered appropriate where reasonably practical and where it can be achieved without having an unacceptable negative impact on the tree's health and/or structure.
- Obstructing Width: Works on Council owned/ managed trees will be considered on a case-by-case basis.

#### **Prioritisation of Tree Works**

1.18

To ensure public safety and make the most effective use of resources and, all tree works will be assigned a priority level within the Annual Works Programme. As shown in Table 3.1, emergencies--including storms and similar events--must be addressed immediately and must take priority over programmed work as required.

**Table 1.1 Works Priority Classifications and Timeframes** 

	Completion	
<b>Work Priority</b>		
Emergency	Immediate (Cork City Council has an emergency plan for	
	severe weather conditions and has tree maintenance crews on	
	call 24 hours a day for any tree-related emergencies.)	
1	3 – 6 months	
2	12 – 18 months	
3	Work, which is not deemed urgent, carried out within 24 months subject to available resources.	

## **Inspection Frequency**

1.19

**Policy:** Cork City Council tree work will be prioritised and carried out according to identified hazard or risk.

Trees that currently require no works will be scheduled for re-inspection. Based on the tree's current condition and the potential impact any issues with the tree could pose to the human activities and built structures around it, the tree's inspection schedule will be categorised as red, orange, or green:

Table 1.2. Inspection Frequency by Colour Code

Inspection Category	Inspection Frequency
Red	18-month cycle
Orange	36-month cycle
Green	60-month cycle

# **Public Tree Removal and Felling**

1.20

Public tree removal will be a last resort option after all alternative solutions have been explored and will be carried out in line with details set out in Policy 4 as set out in this Tree Strategy.

1.21

Prior to the cutting down a public tree, Cork City Council will consult with City Council Biodiversity Officers to establish whether any ecological surveys are required per the Wildlife Acts or EU Habitats Directive (e.g., a bat survey) and will carry out the necessary surveys and any associated processes as required.

#### **Stump Removal**

1.22

It is not always possible or appropriate to remove a tree stump immediately after tree felling. Where practicable, the Council may leave some stumps and standing monoliths of dead timber for biodiversity reasons, typically in parks and large open spaces. Deadwood supports a vast array of invertebrates which in turn are a source of food for birds, bats, and other wildlife. In other cases, tree stump removal is normally undertaken when there are enough stumps for their removal to be economical, which could be six months or more after tree removal. Under these circumstances, a short tree stump (typically around one metre high) is left as a temporary measure so that the stump does not constitute a trip hazard in the intervening period.

# **Replacement Planting**

1.23

At some point, every tree will go into decline and will reach a stage where it is no longer possible to retain in an urban setting. As part of proactive approach to tree care, Cork City Council will identify areas of aging tree populations and put plans in place to allow for continuity in canopy cover in these. In cases where it is appropriate to replant a

replacement tree in the same location as the felled tree, replanting may not occur immediately, as sufficient time needs to elapse to allow breakdown of residual underground root material and allow space for the new planting. For larger trees, this could take between three and five years before the former tree's root material decomposes sufficiently. Replacement planting could also be required in cases where trees are cut down to facilitate necessary building/construction works. In these cases, replacement planting may need to occur offsite.

## **Ivy on Public Trees**

1.24

Cork City Council acknowledges the value of ivy (*Hedera helix*) as a habitat and food source for wildlife. However, ivy can significantly restrict visibility of a tree and prevent identification of obvious defects. This situation can pose an extreme risk to public health and safety and reduce tree longevity. Given this, removal of ivy will be carried in some circumstances—subject to prior ecological assessment--for risk management purposes and to increase the longevity of our trees.



# **Appendix 2: Guidelines for Community Tree Planting Proposals on Council Owned Land**

Community proposals should align with best practice approaches set out in Chapter 7 of the Tree Strategy. In addition, any proposed planting on Council-owned land must have the prior permission of Cork City Council for the following reasons:

- reduce and mitigate against potential bio-security issues such as ash die-back and oak processionary moth;
- ensure that the species, location and quantity of planting is appropriate to prevent issues arising in the long-term and to allow for longevity and high quality in the city's tree stock; and
- ensure that the Council are aware of planting locations, preventing the accidental removal of shrubs and trees, particularly when planting smaller whips.

In putting forward proposals, groups should be aware that Cork City Council receives large volumes of requests for community tree planting, particularly on green open spaces. Over planting can have a negative impact on tree health and reduce longevity and quality in the tree stock. Trees require space to reach their potential and to have a large impact on canopy cover. One appropriately planted tree can provide larger benefits than multiple poorly planted trees and over a longer course of time. To prevent over planting Cork City Council will set a limit on the number of trees that groups can plant in each area to maximize the benefits trees provide. This will be reviewed on a case-by-case basis.

Note: In due course, these guidelines will be further enhanced and developed as part of Action 29 of the Tree Strategy, "Further develop guidelines community groups can use to design and seek approval for tree planting proposals on Council owned land."

# **Appendix 3: Legislative and Policy Framework Regarding Trees**

The aims and objectives of the Tree Strategy are guided and impacted by Global, EU, National and local polices and guidelines as summarised below.

## 3.1 Global

## **UN Sustainable Development Goals**

A universal call to action to end poverty, protect the planet and improve the lives and prospects of everyone, the <u>17 Goals</u> were adopted by all UN Member States including Ireland in 2015, as part of the 2030 Agenda for Sustainable Development which set out a 15-year plan to achieve the Goals. The goals are voluntary and address the global challenges we face, including those related to inequality, climate change, and environmental degradation. With less than ten years until the target date of 2030, the benefits trees provide can play a role in meeting and endorsing these goals, as a nature-based solution. The implementation of the Cork City Tree Strategy can make a positive contribution to the fulfilment of the following Sustainable Development Goals:

- Goal 3 Ensure healthy lives and promote well-being for all at all ages.
- Goal 11 Make cities and human settlements inclusive, safe, resilient, and sustainable.
- Goal 13 Take urgent action to combat climate change and its impacts.
- Goal 15 Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

# **Paris Climate Change Agreement**

Members of the United Nations Framework Convention on Climate Change signed the Paris Agreement in 2016, its central aim is to strengthen the global response to the threat of climate change. It is estimated that Nature Based Solutions can provide up to one-third of the emissions reductions required by 2030 to meet the Paris Agreement targets and must be in conjunction with decarbonisation of key industry sectors. <sup>13</sup> Tree planting represents a practical example of a Nature Based Solution which will contribute to this aim.

#### **World Economic Forum**

In a bid to restore biodiversity and help fight climate change, the World Economic Forum has launched a global initiative to grow, restore and conserve 1 trillion trees around the world (1t.org).

# **European Union**

At the EU leads several plans and policies linked with tree strategies, in accordance with the European Green Deal. In 2020, forests some 38% of total land area in the EU, and the EU has pledged to plant 3 billion additional trees by 2030.

#### **EU's Biodiversity Strategy for 2030**

<sup>&</sup>lt;sup>13</sup> https://climatechampions.unfccc.int/heres-why-we-must-urgently-scale-up-natural-climate-solutions/

EU has pledged to plant 3 billion additional trees by 2030. The European Commission sets out in a roadmap several conditions and resources that can be used to make a success of individual projects regarding forests, ensuring they are in line with EU guidelines, and providing label of the 'EU 3 billion trees' initiative and funds to the projects. Moreover, both individuals and organisations will be encouraged to make a tree-related pledge through the EU Climate Pact website. The Pact will also provide support in the form of consultancy hours to the best projects (pledges) to help them upscale or replicate. A monitoring system is available on the Forest Information System for Europe website, and submitting and reporting planting is enabled with a link to the form to submit and report planting on the EEA website. An EU-funded project named URBAN GreenUP which aims at developing, applying, and validating a methodology for Renaturing Urban Plan was developed and is creating a network of Cities interested in fighting against climate change through nature-based solutions.

#### **EU Soil Strategy**

Incites authorities in leading policies to reduce land consumption and balancing it by greening, notably with balanced appropriate and adaptable urban planning.

# **EU Clean Air Policy**

Ireland is implementing the EU Clean Air Package containing a suite of policies and legislative proposals and trees are part of the solution to clean air, particularly in urban environments.

# **EU Habitats Directive**

Ensures the conservation of a wide range of rare, threatened, or endemic animal and plant species. Some 200 rare and characteristic habitat types are also targeted for conservation. Together, with the Birds Directive they have created the Natura 2000 nature protection network. The Habitats Directive required Ireland to identify a network of sites where important or endangered animal or plant species, or certain rare or vulnerable habitat types, are present to a degree that they are significant at a European level.

# **EU Plant Health Directive**

In acting to control plant diseases, Ireland like all other EU Member States must comply with EU plant health legislation.

# **Forest Reproductive Material Directive**

Ensures that all material used (seeds, plants, and cuttings) has been produced from approved basic material and meets the requirements of one of the four categories of forest reproductive material.

## **National**

Legislation

#### Forestry Act 2014 (as amended)

A Tree Felling Licence granted by the Minister for Agriculture, Food and the Marine provides authority under the Forestry Act 2014 to fell or otherwise remove a tree or trees and to thin a forest for silvicultural reasons.

# Wildlife Act 1976 (as amended)

The Wildlife Act protects an array of species including native birds, mammals, reptiles, and amphibians. It is the principal legislation protecting nesting birds in Ireland. The Act makes it an offence to kill, injure or take any wild bird and to take, damage or destroy any nest that is either in use or being built. In general terms, bird nesting in Ireland can be expected to take place between March 1st and August 31st. The Council will carry out tree pruning and felling outside of the nesting period as far as reasonably practicable. An example of an exception to this would be on the grounds of health and safety concerns.

# Planning & Development Act 2000 (as amended)

3.1

- Section 34(4)(e) allows for conditions attached to planning decisions requiring the planting, maintenance, and replacement of trees
- Section 205 set out provisions for Tree Preservation Orders
- Section 212 establishes that a planning authority may secure land for the preservation of any trees or woodland
- The First Schedule related to Section 10 establishes that the Development Plan may indicate objectives to preserve and protect trees

## Occupier's Liability Act 1995

As landowners, the Council is responsible for the safety and maintenance of trees on public land. This is also true for private tree owners and trees within their ownership.

National Plans, Strategies, Etc.

#### **All Ireland Pollinator Plan**

The All-Ireland Pollinator Plan is a framework bringing together different sectors across the island of Ireland to create a landscape where pollinators can survive and thrive. It is implemented by the National Biodiversity Data Centre. In 2019 Cork City Council agreed to support the ethos of the plan, to consider the plan in policies, plans, and management decisions where possible, and to carry out pollinator-friendly actions as outlined in the plan.

# Plant Health and Biosecurity Strategy 2020-2025

3.2

This strategy sets out the importance of plant health and biosecurity for Ireland as well as ensuring that all relevant stakeholders are aware of the risks to plant health in Ireland, and their role and responsibilities to reduce that risk.

#### **Project Ireland 2040**

The Government's long-term overarching strategy on social, economic, and cultural development. It is anticipated that Cork city's population will grow by at least 50% over the lifetime of the plan. Project Ireland 2040 underlines the need for compact growth.

#### **Citizen's Assembly on Biodiversity Loss**

The Citizens' Assembly on Biodiversity Loss was one of four Citizens' Assemblies contained in the Programme for Government, Our Shared Future. It comprised 99 members of the public, randomly selected from households across Ireland, and an independent Chairperson appointed by the

Taoiseach. Informed by detailed input from experts, stakeholders, and the general public, in 2023 the Assembly agreed 73 high-level recommendations and 86 sectoral-specific recommendations related to how the State can improve its response to the issue of biodiversity loss. These included:

- Section 1.15 specifically addresses Forestry, Woodland, and Hedgerows.
- 89. More farms and farmers must be encouraged and rewarded for adopting the Silvopasture
- approach to farming planting native deciduous trees in amongst pasture lands.
- 123. A new national strategy for the protection, maintenance, restoration, and expansion of Ireland's network of hedgerows must be developed urgently
- 125. The Department of Agriculture, Fisheries and the Marine must implement incentives for State, Semi State, and commercial bodies to establish more nurseries for the cultivation of indigenous hedgerow species and indigenous broadleaf tree species
- 142. Schemes to incentivise people to buy native plants, shrubs, and trees, including native fruiting trees and shrubs, to support garden biodiversity over non-native species should be devised and encouraged.
- 144. Planning policy must be updated to require all new developments to have a significant net-gain for the environment and biodiversity.
- 145. In line with international best practice, the State must increase mandatory requirements for a percentage of green spaces that support biodiversity in urban areas.

#### Local

#### **Corporate Plan**

The five-year Corporate Plan 2024 reflects the Local Economic and Community Plan and guides the delivery of services. It targets the development of a sustainable, integrative, healthy and communities engaging city following on from Cork being a WHO Healthy City.

# Cork City Development Plan 2022-2028

The Cork City Development Plan 2022-2028 identifies the lands planned for development and regeneration. It includes objectives to develop the green and blue infrastructure of the city and to sustainably develop neighbourhoods.

Table 5.1 of Cork City Natura Impact Report in support of the Appropriate Assessment for the Cork City Development Plan 2022-2028 also summarises mitigation measures of Cork City Development Plan to protect the environment, which includes the need for a Tree Strategy for the planning, protection, and maintenance of trees.

#### **Air Quality Strategy**

Commissioning a Tree Planting Strategy for Cork city is one of the action of the Cork City Council Air Quality Strategy 2021-2026. One objective is the increase in tree cover (urban woodland areas) to improve ambient air quality.

# **Heritage & Biodiversity Plan**

Developing a Tree Management program for Cork City is one of the actions of the Cork City Heritage and Biodiversity Plan 2021-2026. The three other actions regarding trees are planting 1500 native Irish trees per annum, investigating mechanisms to protect non

designated areas of biodiversity value, ecological corridors, and trees on land in private ownership, and mapping and creating a database of habitat, species, and existing area of biodiversity importance.

#### **Climate Action Plan**

Currently being developed, the plan follows the Climate Change Adaptation Strategy 2019-2024 and aims at identifying and enhancing strategic actions through consultation and partnership processes.

#### **Previous Local Studies and Plans**

Recommended actions noted in previous studies and position papers have reviewed in the preparation of this strategy, including *Towards an Urban Forest Strategy for Cork City* 1996 (unpublished) and the <u>Cork City Landscape Study 2008</u>.

# **Tree Planting Pledges**

Cork city council are currently committed to two tree planting pledges that aim to plant trees in an appropriate and sustainable way: UNECE Trees in Cities Challenges and EU tree billon trees.

#### **REFERENCES**

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- [3] Street Trees Close to the Home May Reduce the Risk of Depression
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- [7] Department of Agriculture, Food and the Marine (2020) <u>Plant Health and Biosecurity</u> <u>Strategy 2020-2025</u>
- [8] Irish Forester, Vol. 76. (2019) Street Tree Planting in 19th and Early 20th Century Dublin
- [9] The Heritage Council. (2016) Conserving Hedgerows
- [10] National Tree Safety Group. (2011) <u>Common sense risk management of trees: guidance on trees and public safety in the UK for owners, managers, and advisers.</u>
- [11] City of Vancouver. (2018) <u>Urban Forest Strategy 2018 Update</u>